

HUNGRY FOR TOBACCO

AN ANALYSIS OF THE ECONOMIC
IMPACT OF TOBACCO
ON THE POOR IN BANGLADESH

WORK
FOR A
BETTER
BANGLADESH

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Hungry for Tobacco

**An analysis of the economic impact of tobacco
on the poor in Bangladesh**

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**PATH Canada
Work for a Better Bangladesh**

Dhaka, July 2000

Summary

Poverty in Bangladesh is widespread, affecting half the population and causing daily suffering to tens of millions of people. National development is slowed by the poor health of the population: UNICEF estimates that Bangladesh loses the equivalent of more than 5% of its GNP in lost lives, disability, and productivity caused by malnutrition. Tobacco consumption further aggravates poverty both on the individual and national level, and tobacco control policies are imperative to improve the life of the poor and the economic development of the nation.

A reduction in tobacco consumption in Bangladesh would lead to several significant gains as people switched from purchasing tobacco to other goods. If tobacco were no longer consumed in Bangladesh, the following economic gains would be anticipated:

- ◆ Savings in foreign exchange for import of tobacco of over \$14 million US per year.
- ◆ A net increase in employment of almost 19%.
- ◆ Large increases in household investment in housing, education, and health care.
- ◆ 10.5 million fewer people going hungry.
- ◆ 350 fewer deaths from malnutrition of children under age 5 each day.

While tobacco will not disappear overnight, its use could decline sharply if strong policies were implemented. Significant declines in tobacco use would translate to significant gains for the country: more jobs, more individual investment in basic needs, and fewer children needlessly going hungry and dying of malnutrition.

Contributors

The research with rickshaw pullers and poor families discussed in this paper was carried out by a team of Work for a Better Bangladesh (WBB) researchers: Syed Mahbubul Alam, Amit Ranjan Dey, Ronjit Saha, Biplob Dhar, Aminul Islam Sujon, Kayum Uddin Ahmed, and Aliur Rahman, with further assistance from Apaur Ahamed.

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Contents

Section 1

Bangladesh, land of poverty and tobacco.....	4
----------------------------------------------	---

Section 2

Tobacco and the national economy.....	7
---------------------------------------	---

Section 3

Survey of Dhaka rickshaw pullers.....	10
---------------------------------------	----

Section 4

Expenditure on tobacco versus basic needs.....	11
------------------------------------------------	----

Section 5

Expenditure on tobacco versus food.....	17
-----------------------------------------	----

Section 6

Trends in consumption of tobacco versus food and other basic needs.....	22
-------------------------------------------------------------------------	----

Section 7

Tobacco and malnutrition.....	27
-------------------------------	----

Section 8

Conclusions and BATA Recommendations.....	30
-------------------------------------------	----

Section 1

Bangladesh, land of poverty and tobacco

Sophisticated cigarette advertising and dire poverty: are cigarettes ads meant to offer people a false hope of freedom from the daily struggles of life?

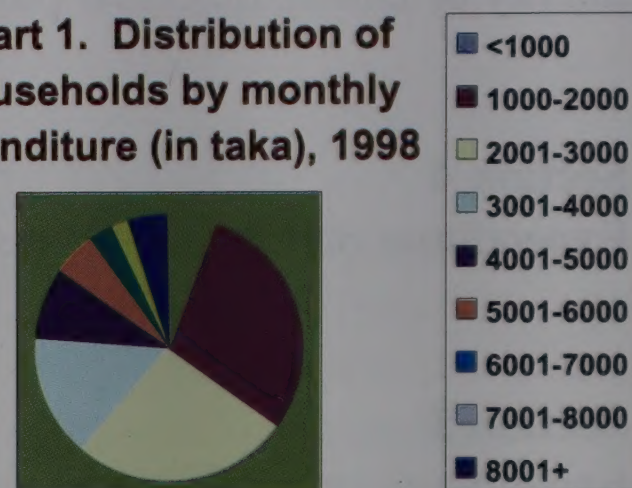
Bangladesh, with a population of about 130 million people, is one of the poorest countries in the world. While life expectancy has increased over the past decade, it is still only 60.5 for women and 60.7 for men. As shown in Table 1, nearly half the population of Bangladesh in 1995-96 was below the poverty line, and about half of the poor were below the "hard core" poverty line. While the situation has improved somewhat in rural areas, it has actually worsened in urban areas.

Most households spend less than 4,000² taka each month.³ Thirty percent of families are classified as very poor, 22% as poor, and less than 1% as rich.⁴ While the government and many NGOs are looking for solutions to the problems of hungry and poverty, the problem remains: day after day, millions of Bangladeshis do not get sufficient food for their daily needs. Their troubles are compounded by their lack of resources for adequate housing, education, and health care. For the half of the population that is poor, little hope exists for a better future, a future in which children will be adequately fed, clothed, housed, and educated.

Co-existing with this devastating poverty is a thriving tobacco industry. The use of chewing tobacco, bidis, and cigarettes is widespread. About 15 local companies compete for the lower end of the cigarette market, utilizing billboards, banners, and newspaper and satellite television

ads. British American Tobacco (BAT), which owns the controlling share of Bangladesh's former tobacco monopoly, is a ubiquitous presence through its glossy media advertising, cigarette display cases, storefront signs, and of course cigarettes. In 1998, BAT reported pre-tax profits of 771.4 million taka (approximately US\$15.4 million), while it spent 167 million taka (US\$3.34 million) on brand promotions and development.⁵

Chart 1. Distribution of households by monthly expenditure (in taka), 1998



BAT heavily markets its expensive brands through campaigns utilizing images of wealth and sophistication. These have included a contest to win gold coins, and the sailing of a luxury yacht under the name "Voyage of Discovery", to promote its John Player Gold Leaf brand. Gold Leaf, at about U\$0.76 a pack for regular and \$0.94 for light, suggests wealth from its very name. Cheap but colorful signs promoting Gold Leaf cigarettes are displayed all over Bangladesh, even on village stores built only of tin and thatch.

¹ Bangladesh Bureau of Statistics,

Statistical Pocketbook Bangladesh 1998. Dhaka: 1999, p. 157. Figures are for 1998, the latest year given.

² The current exchange rate is about US\$1.00=50 taka.

³ Bangladesh Bureau of Statistics, *Analysis of Basic Needs Dimension of Poverty Volume III*. Dhaka: 1998, p. 92.

⁴ Bangladesh Bureau of Statistics, *Analysis of Basic Needs Dimension of Poverty Volume I*. Dhaka: 1995, p. ix.

⁵ British American Tobacco Bangladesh, *Reports & Accounts 1998*.

Chart 2. Percentage of rural population living in poverty

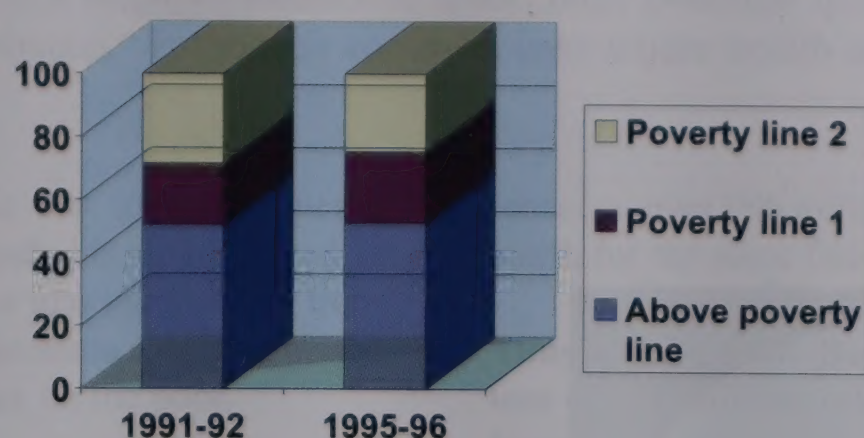


Chart 3. Percentage of rural population living in poverty

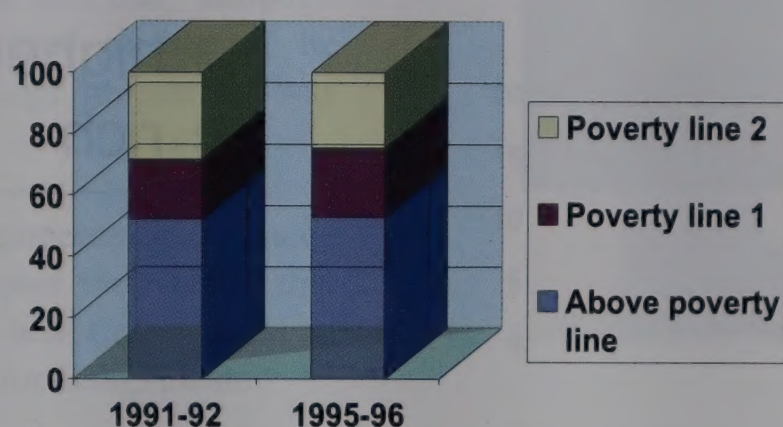
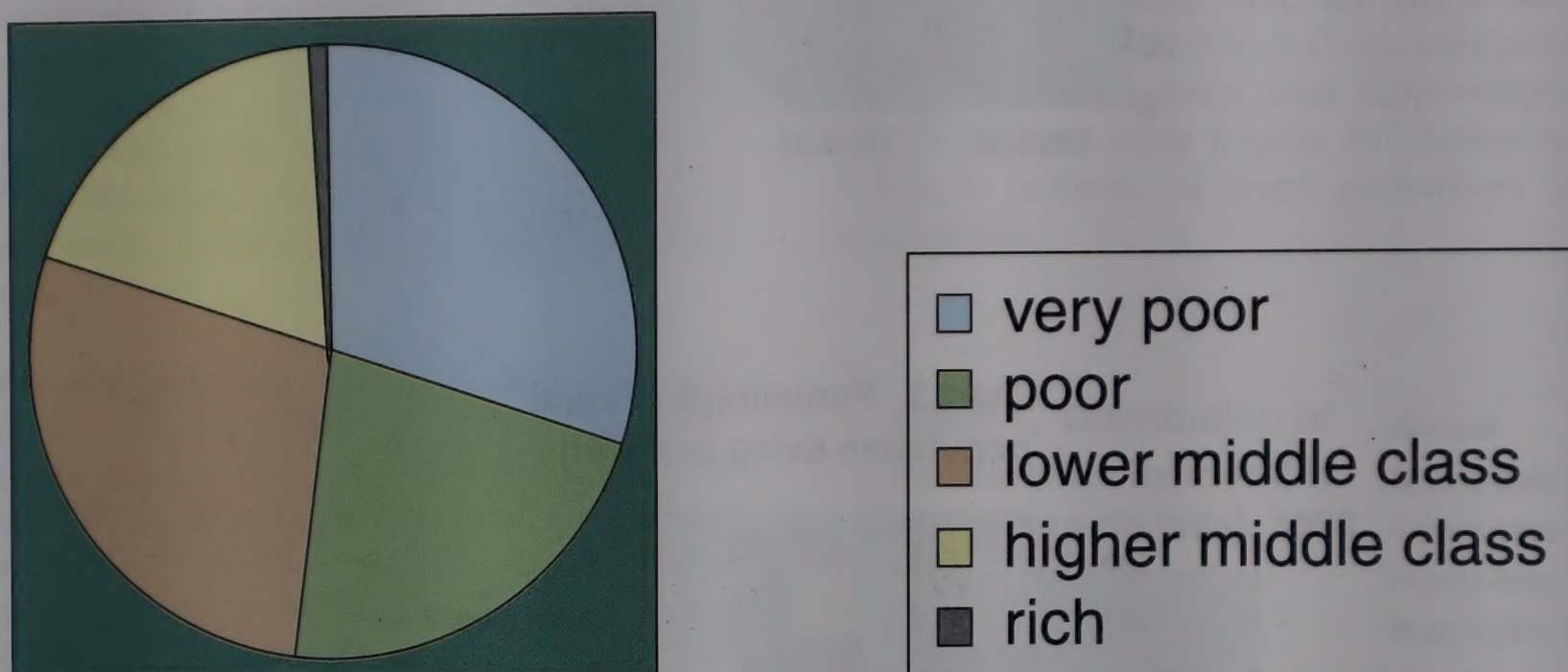


Table 1. Number and proportion of population below recommended calorie intake and "hard core" poverty lines by residence, 1995-96.⁶

Year	Poverty line I: recommended intake (2122 calories/day/person)				Poverty line II: "Hard core" poverty (1805 calories/day/person)			
	Urban		Rural		Urban		Rural	
	Absolute number (millions)	%	Absolute number (millions)	%	Absolute number (millions)	%	Absolute number (millions)	%
1991-92	6.8	46.7	44.8	47.8	3.8	26.2	26.5	28.3
1995-96	9.6	49.7	45.7	47.1	5.2	27.3	23.9	24.6

⁶ Bangladesh Bureau of Statistics, *Statistical Pocketbook Bangladesh 1998*. Dhaka : 1999, p. 391

Chart 4. Distribution of families by poverty classification, 1995



BAT's other high-priced brand, Benson & Hedges, at about U\$1.50 per pack, is even more expensive than Gold Leaf, and also capitalizes on the image of wealth, from the gold color of the pack to the slogan "Be gold" on billboards in major cities. The use of the image of wealth in promoting cigarettes is particularly ironic given that in most countries around the world, the poor smoke far more than the rich.

But irony is appropriate here, since the false hope of wealth, and the unnecessary expenditure on tobacco that results, may remove any hope the poor had of a better life.

Section 2

Tobacco and the national economy

Millions of dollars lost in a negative balance of trade, huge potential increases in employment if other goods replaced tobacco: is tobacco control a case where health and economic objectives converge?

Tobacco companies argue that tobacco benefits national economies and individuals employed in the industry. Others argue that tobacco, far from benefiting economies, represents a net drain, and constitutes a further burden on the poor.⁷

The tobacco industry is currently seen by the Bangladeshi government, as well as those who believe the advertising, as a source of wealth. The mayor of Chittagong, Mohiuddin Chowdhury, attended a celebration when the Voyage of Discovery reached his city; according to one newspaper account, he said that "although cigarette smoking is injurious to health, he welcomed the yacht as foreign investment was welcome to Bangladesh."⁸

Following are the major arguments that tobacco companies put forth to support their claim that tobacco is economically beneficial, and an analysis of those arguments for Bangladesh.

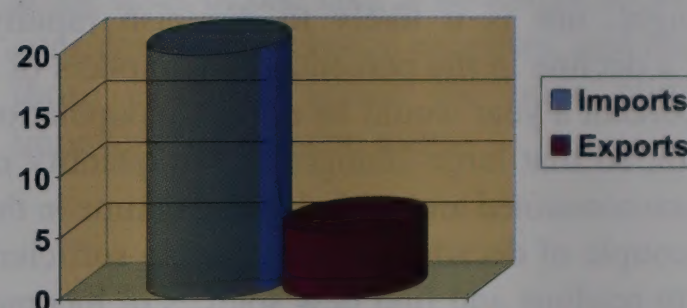
Generation of foreign exchange through export

Bangladesh produces and exports tobacco, thereby generating much-needed foreign exchange. The earnings for the fiscal year July 1997 to June 1998 were over 270 million taka (US\$5.4 million). But as the smoking rates in Bangladesh are high and locally-produced tobacco is insufficient to meet the demands of the population, Bangladesh also imports

tobacco: over 996 million taka (US\$19.93 million) worth for the same fiscal year.⁹

Thus in one year, Bangladesh incurred a net loss of 726 million taka (over US\$14.4 million), from a negative balance of trade in tobacco. Rather than making money exporting tobacco, Bangladesh continues to lose huge sums of hard capital through its import.

Chart 5. Import vs export of tobacco, in millions of US dollars



Generation of revenue through taxation

BAT is a major taxpayer in Bangladesh. But an increase in taxes would actually mean an increase in government revenue, as not enough people would quit to offset the gains from a higher tax level. A tax increase would have a huge beneficial effect, as youth and the poor are also the most sensitive to price increases. A portion of the tax could be used for smuggling control measures, such as tax-paid markings that can't be counterfeited, and stronger police control of smuggling. Other measures, such as

⁷ Mary Assunta, "Tobacco and Poverty" in *Together Against Tobacco*, Proceedings of the INGCAT International NGO Mobilisation Meeting, Geneva, 15-16 May 1999, pp. 25-29.

⁸ Enamul Huq, "Arrival of Discovery celebrated." *The Independent*, 23 November 1999.

⁹ Bangladesh Bureau of Statistics, *Foreign Trade Statistics of Bangladesh 1997-1998*. Dhaka: 1998, p. 28 (exports) and pp. 276-7 (imports).

stronger penalties for smugglers, and better international control of the flow of cigarettes, would reduce smuggling while maintaining government profits and health objectives.¹⁰

Creation of jobs for farmers, factory workers, shopkeepers, and others

Tobacco company executives argue that if people stop consuming tobacco, huge numbers of people will lose their jobs. They fail to mention that cigarette manufacturing grows ever more mechanized, and thus hires ever few people, over the years. In their list of those likely to be affected, they neglect to mention firefighters, doctors specializing in cancer, heart disease, and respiratory ailments; and other health care workers. They also imply that the money currently spent on tobacco, and the jobs that are thereby generated, will entirely disappear from the economy if tobacco use ceases.¹¹

In fact, tobacco consumption will not disappear overnight, nor is it likely to diminish rapidly. Even a decline in the percentage of smokers of a few percent a year would be offset by population growth, so that large changes in the quantity of tobacco consumed are unlikely for any time in the next couple of decades—giving people sufficient time to readjust and find new sources of income. Individuals currently employed in the tobacco industry are thus unlikely to be harmed by any decrease in consumption.

A recent report by the World Bank examines a range of economic issues in arriving at its conclusion that tobacco *control* benefits national economies. According to the report, tobacco only benefits the economies of the handful of countries currently highly dependent on tobacco export. Bangladesh, as the numbers show, is not one of those countries.

Even if tobacco use were to decline sharply, the economy would not suffer. When people stop consuming tobacco, their savings do not disappear from the economy. Rather, they spend the money on other items, items that involve labor in their production, transportation, and sale. When their money is spent on locally-produced items, it can actually have a greater beneficial effect on the economy than if it were spent on tobacco.¹²

Tobacco is not a major agricultural crop in Bangladesh, and thus decreasing production would not be likely to affect many people, particularly given the economic viability of alternate crops.¹³ Not only could farmers grow other crops, but factory workers could also produce other goods, and shopkeepers and informal vendors sell those crops and goods. Those goods include food, the purchase of which would have beneficial effects well beyond employment. Planting of more trees to supply an increasing demand for fruit would benefit the environment. The production, distribution, and sale of food and other other items, create jobs. Food production remains far less mechanized than does cigarette production, and thus has the potential to employ more people. More consumption of food and less of tobacco would mean a huge shift from illness to health.

The World Bank has estimated that the extent of this benefit for Bangladesh would be enormous: an 18.7% increase in employment if all domestic¹⁴ tobacco consumption in Bangladesh ceased, as people switched to buying other goods that in turn generate jobs.¹⁵ What is unique about tobacco is not its ability to generate employment, but rather its ability to kill its users.

¹⁰ Luk Joosens and Martin Raw, "Cigarette smuggling in Europe: who really benefits?" *Tobacco Control* 1998; 7:66-71.

¹¹ Kenneth E. Warner and George A. Fulton, "Importance of tobacco to a country's economy: an appraisal of the tobacco industry's economic argument." *Tobacco Control* 1995; Vol. 4, pp. 180-183.

¹² *Ibid.*

¹³ Muzaffer Ahmad, "Tobacco and the Economy of Bangladesh." Bangladesh Cancer Society: Key note speech delivered on the occasion of World No Tobacco Day, 31 May 1995.

¹⁴ While tobacco is imported for local production, virtually all cigarettes consumed are "domestic"—made in Bangladesh, albeit often by BAT.

¹⁵ Prabhat Jha and Frank J. Chaloupka, *Curbing the epidemic: governments and the economics of tobacco control*. World Bank: 1999, p. 70.

What is the value of health?

Even if one believed that tobacco was beneficial to the Bangladesh economy, would the economics override the tremendous health concerns of tobacco use? Even several tobacco company executives—under the pressure of lawsuits and release of formerly private documents—now admit *some* of the dangers of tobacco consumption.

A Canadian tobacco executive acknowledged, “You increase the risks for a list of diseases as long as both your arms if you are a smoker.”¹⁶ A manager for British American Tobacco in New Zealand was equally direct: “You would really have to be sticking your head in the sand to deny [the health risks from smoking]. The evidence is very convincing. If you are going to smoke you are really going to increase your risk of lung cancer, emphysema or heart disease.”¹⁷

The list of tobacco-related diseases is long indeed, and includes not just lung, but many other kinds of cancer as well as other ailments, for a total of twenty-five different diseases. Passive smoking—the inhalation of the tobacco smoke of others—causes lung and breast cancer and heart disease, as well as exacerbating asthma, in non-smokers. Fetuses exposed to smoke in the womb run higher risks of being born underweight, having mental, physical, and psychological development problems, and being miscarried or stillborn. Tobacco smoke is a major cause of Sudden Infant Death Syndrome (SIDS). Would these diseases become tolerable if tobacco were perceived as economically beneficial?

The third leading cause of death in Bangladesh, after diarrhea and all types of heart and cardiovascular disease, is asthma¹⁸. Since 72% of households in Bangladesh have only one or two rooms¹⁹, in most households many people must share each room. If one person smokes, several people, including infants, young children and women, are likely to inhale that smoke. Given the high mortality from asthma, we see just one more way in which tobacco kills. Tobacco is also a major cause of heart and cardiovascular disease, thereby contributing to the second leading cause of death as well.

Tobacco is clearly harmful, to smokers and non-smokers, to individuals and to the nation, in both the short- and long-term. This report focuses on the economic aspect of tobacco at the household level, as each taka spent on tobacco represents one taka that could have been spent on food and other household necessities. What sounds benign at the level of one taka is no longer so when one considers actual tobacco expenses, and multiplies those expenses across the huge number of impoverished tobacco users.

¹⁶ Robert Parker, president of the Canadian Tobacco Manufacturers' Council, quoted in the Edmonton Sun, 23 April 2000.

¹⁷ Vickie Curtis, corporate and regulatory affairs manager for British American Tobacco in New Zealand, quoted in “Listen up smokers: life is about to get a whole lot harder”, The (NZ) evening Post/B&W Industry Watch, 15 April 2000.

¹⁸ Bangladesh Bureau of Statistics, *Statistical Pocketbook Bangladesh 1998*. Dhaka: 1999, p. 367.

¹⁹ Bangladesh Bureau of Statistics, *Analysis of Basic Needs Dimension of Poverty Volume III*. Dhaka: 1998, p. 55.

Section 3

Survey of Dhaka rickshaw pullers

A grueling job for men, a tough existence for their families, and yet another money-making opportunity for the tobacco companies.

In order to understand the personal side of tobacco economics, we conducted a small survey among tobacco-using rickshaw pullers in Dhaka, and interviewed poor families in Dhaka and in a village near Comilla (a small city about 90km from Dhaka). For the rickshaw pullers, a survey form was developed and pre-tested. The researchers received a brief training in the use of the forms, then gathered the information over a short period in April 2000. The families were interviewed using an open-ended guide. The results were then analyzed by the research team. The stories in boxes are taken from this research.

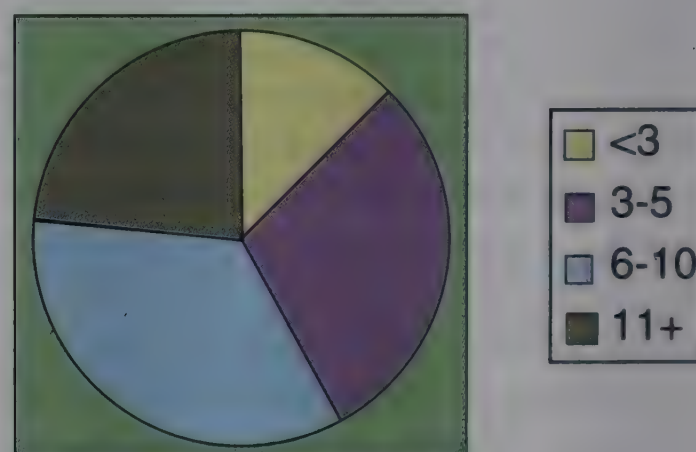
The rickshaw puller survey involved interviews with 123 men aged 15-70, of whom 17 were single and 106 married. Researchers asked the men about their daily income, and their consumption of and daily expenditures on tobacco.

Half of the rickshaw pullers said they were illiterate. More than half smoked cigarettes alone, while some smoked bidis and a smaller number smoked both. The most popular cigarette brands were Navy and Star. Expenditure on tobacco ranged from one to 35 taka per day, with an average of eight. Fifteen of the men reported spending less than three taka daily on tobacco; 37 3-5 taka, 42 6-10 taka, and the remaining 29 reported spending 11 taka or more each day. For many, tobacco represented a significant portion of their income. The range was from 1% to 40%, with an average of 12%²⁰.

The staple diet of the men was rice, vegetables, and to a lesser extent fish and lentils. Men reported eating meat, eggs, and milk rarely if ever—weekly, twice a month, or less. The men

also tended to eat better than their families, so that the high-protein foods they sometimes consumed were less frequently consumed by their wives and children. It was clear that, for this group of low-income men, tobacco expenditure represented a sizeable portion of their income, and a significant diversion of that money from food for themselves and their wives and children.

Chart 6.
Distribution of daily tobacco expenditure in taka



Slim hopes of marriage

At age 24, Korim* is already thinking about marriage. He earns 100-120 taka per day as a rickshaw puller, but he must also support his family. His father is retired, and his brothers live elsewhere. Three of his sisters are married, but the family still must find money to marry the other two. Korim explained that he needs about 5,000 taka to marry, a seemingly impossible sum. Meanwhile, he smokes both bidis and Scissors cigarettes, which cost him 8-10 taka a day. He was astonished when we pointed out that if he saved his tobacco money, in about a year and a half he would be able to marry.

* All names have been changed.

²⁰The four highest percentages were deleted from the analysis.

Section 4

Expenditure on tobacco versus basic needs

Per capita spending on health and education is dwarfed by the sums spent by users of tobacco. When an addiction becomes a “basic need”, what hope remains for our future?

The poor in Bangladesh spend nearly all their money on basic needs, and are still unable to purchase the essentials for themselves and their families. In a situation of dire need, every taka wasted represents a further decline in standard of living. But despite the tremendous poverty in Bangladesh, smoking rates are quite high. Across the age groups, smoking rates are much higher in men than in women²¹. Rates increase with age, though they decline dramatically after age 50 in both men and women. Men aged 35-49 have the highest rate, at 70.3%.

In terms of income groups, smoking rates are highest among the poorest, as shown in Table 2. The highest rate, 58.2%, is among those with a household income of less than 1,000 taka/month. The rates decline proportionally as income increases, with the lowest rate, 32.3%, being for those with a monthly household income of 5,000 taka or more. **Those who can least afford to purchase tobacco are the most likely to consume it.**

Expenditures for tobacco vary greatly depending on the type of tobacco, with men spending far more on tobacco than women. In 1997, tobacco expenditure ranged from a low of almost 58 taka a month for women smoking hukkas, to a high of 325 taka a month for men smoking cigarettes. For both sexes, cigarettes are the most expensive form of tobacco consumed, followed by bidis, with hukka, pipes, and other forms the cheapest²². Cigarettes are also by far the most widely advertised tobacco product.

Chart 7. Smoking rates by age and sex, 1997

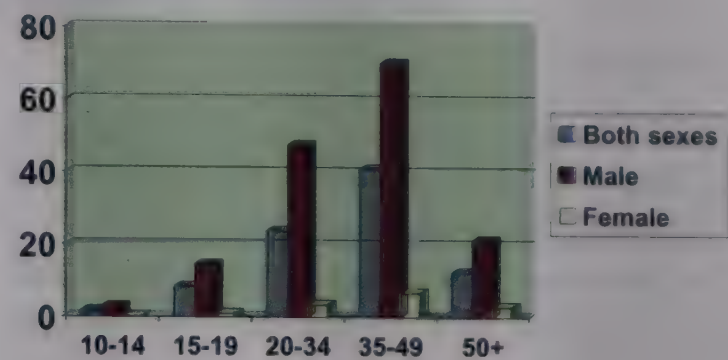


Table 2. Male smoking rates by income group²³

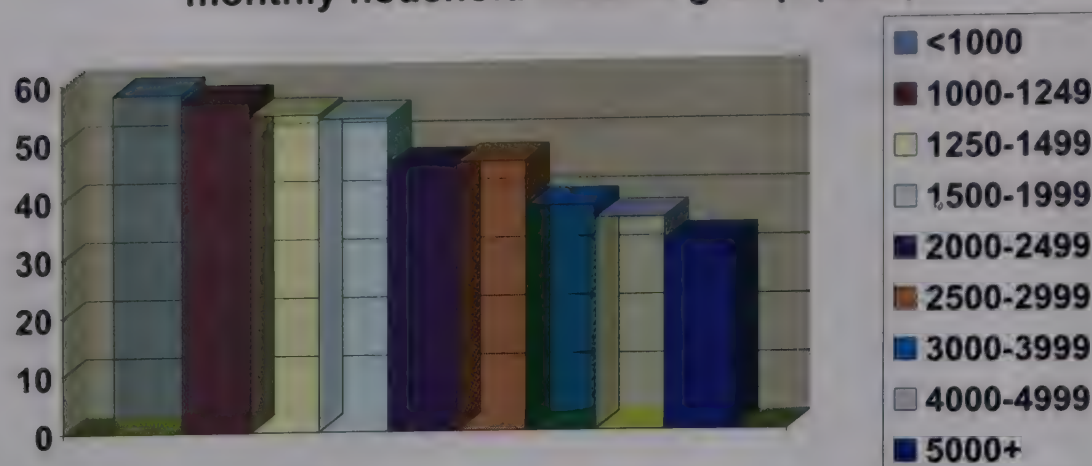
Monthly household income (taka)	% smokers
<1000	58.2
1000-1249	56.7
1250-1499	54.4
1500-1999	53.7
2000-2499	45.6
2500-2999	46.1
3000-3999	38.4
4000-4999	36.3
5000+	32.3

²¹Statistics on smoking prevalence do not unfortunately clarify whether they refer to smoking only, or to smokeless tobacco use as well. If they do not include smokeless tobacco, then the rates shown for women are far lower than actual rates would be.

²²Bangladesh Bureau of Statistics, *Statistical Pocketbook Bangladesh 1998*. Dhaka: 1999, p. 366. This represents the daily figure multiplied by 30.4.

²³Bangladesh Bureau of Statistics, *Prevalence of Smoking in Bangladesh*, Dhaka: 1996, p. 10.

Chart 8. Male smoking rates by monthly household income group (taka)



In Table 3, we compare average monthly expenditures for tobacco to those for basic needs. In 1997, average monthly expenditure on tobacco for those who use it (an average over all types of tobacco products) was 155 taka for men and 85 taka for women.

Per capita expenditure on clothing, housing, health, and education totals a mere 131 taka per month, which is only 40% of the average male monthly expenditure on cigarettes.

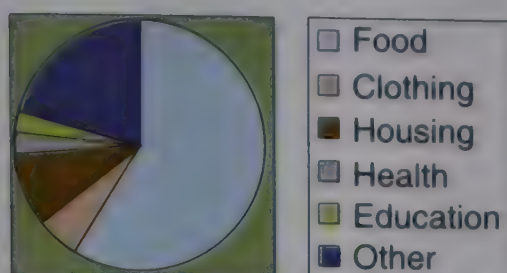
Table 3. Per capita monthly expenditure on basic needs, 1997²⁴

<i>Tobacco spending as percetage of expenditure on basic needs</i>						
	Average monthly expenditure (taka)	Bidis-men: 88	Cigarettes-men: 325	Hukkas/pipes-women: 58	Cigarettes-women 207	Monthly per capita expenditure on tobacco: 8.7
<i>Food</i>	376	23.4	86.5	15.4	55.0	2.3
<i>Clothing</i>	36	244.9	903.6	160.4	574.2	24.2
<i>Housing</i>	61	144.5	533.2	94.7	338.9	14.3
<i>Health</i>	18	498.8	1,807.1	320.9	1,148.4	48.4
<i>Education</i>	16	551.0	2,033.0	361.0	1,292.0	54.5
<i>Other</i>	133	66.3	244.6	43.4	155.4	6.6
<i>Total</i>	640	13.8	50.8	9.0	32.3	1.4

Note: The second column shows the average monthly expenditure in taka for the items listed in the first column. The next five columns show average monthly spending on various forms of tobacco for men and women as a percentage of the average monthly expenditures for basic needs. "Total" refers to the percentage of total monthly expenditure that each form of tobacco represents. The percentages are not additive—that is, for men smokers of cigarettes, the full sum of 325 taka is compared to each item in column one.

²⁴ Bangladesh Bureau of Statistics, *Analysis of Basic Needs Dimension of Poverty Volume II*. Dhaka: 1997, p. 108 (basic needs) and p. 130 (tobacco). Columns show rounded figures for tobacco, whereas unrounded figures were used in calculations.

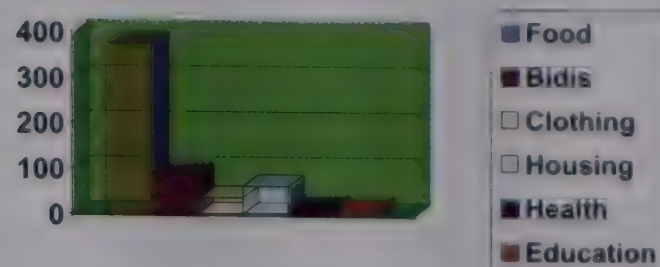
Chart 9. Distribution of monthly expenditure for basic needs, 1997



The typical male cigarette smoker spends over 5 times as much on cigarettes as the per capita expenditure on housing, 18 times as much as for health, and 20 times as much as for education. For women, the figures are only slightly less striking; women who smoke hukkas spend almost as much on tobacco as the per capita expenditure for housing, and over three times as much as the per capita expenditures for health and education. Men spend almost 2½ times as much per month to smoke bidis as the per capita expenditure for clothing.

Monthly per capita expenditure on food was 376 taka, less than twice what women spend on average for cigarettes. Men spend more than 86% as much on their cigarettes as the average per capita expenditure on food.

Chart 10. Men's monthly bidi costs vs. per capita monthly expenditure for basic needs (taka)



Since the figure for *per capita* expenditure on tobacco is an average over the whole population, not just for those who use tobacco, it seems quite low, at less than nine taka per month. But even that figure is significant when compared to other per capita expenditures. The average monthly per capita expenditure on tobacco is almost half the per capita expenditure for health, and more than half for education.

Table 4 re-allocates average monthly tobacco expenditure to basic needs, following the expenditure patterns shown (e.g. 61% for food, 5.7% for clothing). This represents the way a typical person might be expected to spend the money otherwise going to tobacco.

Chart 11. Men's monthly cigarette costs vs per capita monthly expenditure for basic needs (taka)

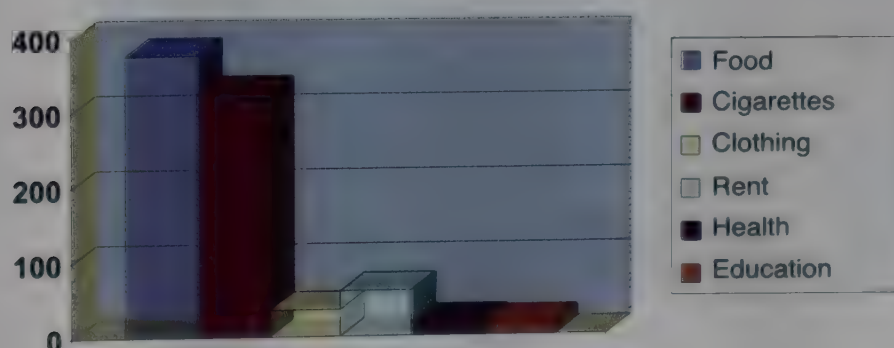


Table 4. Distribution of per capita monthly expenditure in 1997 on basic needs, and additional taka available for each item if tobacco not purchased²⁵

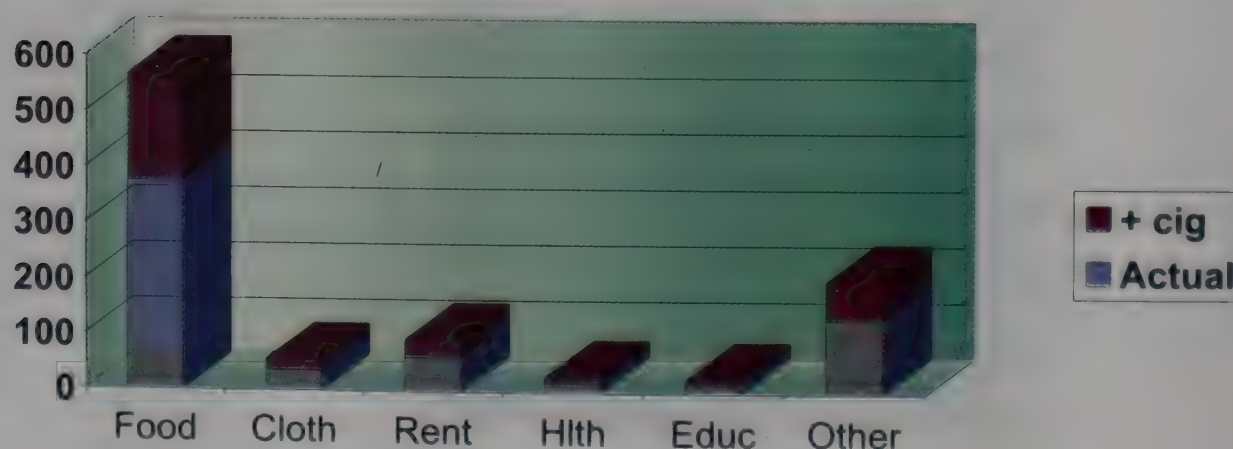
<i>Per capita monthly expenditure on basic needs, in taka and as percentage of total expenditure (% given in parentheses)</i>							
<i>Place of residence</i>	<i>Total</i>	<i>Food*</i>	<i>Clothing</i>	<i>Housing</i>	<i>Health</i>	<i>Education</i>	<i>Other</i>
Rural	597	364 (61.0)	34 (5.7)	47 (7.9)	17 (2.8)	13 (2.2)	122 (20.4)
Urban	958	464 (48.4)	50 (5.2)	165 (17.2)	25 (2.6)	41 (4.3)	213 (22.2)
National	640	376 (58.8)	36 (5.6)	61 (9.5)	18 (2.8)	16 (2.5)	133 (20.8)
<i>Type of tobacco expenditure**</i>	<i>Average expenditure for men***</i>	<i>Additional taka available (tobacco/cigarette expenditure re-allocated across items)</i>					
Tobacco-rural	155	94.5	8.8	12.2	4.4	3.4	31.7
Tobacco-urban	155	75.1	8.1	26.7	4.0	6.6	34.5
Tobacco-nat'l	155	91.1	8.7	14.8	4.4	3.9	32.2
Cigarettes-rural	325	198.2	18.5	25.6	9.3	7.1	66.4
Cigarettes-urban	325	157.4	17.0	56.0	8.5	13.9	72.3
Cigarettes-nat'l	325	190.9	18.3	31.0	9.1	8.1	67.5

* The allocation to food is lower than the 69% figure given above, since we are not here distinguishing by income group.

** "Tobacco" refers to the average across types of tobacco, while "cigarettes" refers exclusively to cigarettes.

*** Monthly total calculated as daily expense for users of tobacco from Table 13 multiplied by 30.4.

Chart 12. Per capita monthly expenditure: actual and with men's monthly cigarette expenditures allocated across categories (national average)



²⁵ Bangladesh Bureau of Statistics, *Analysis of Basic Needs Dimension of Poverty Volume II*. Dhaka: 1997, pp. 108-109. We calculated the percentages based on the totals given.

The greatest difference is in the area of greatest expenditure: food. As an average across income groups, people would be likely to spend from 75 to 198 additional taka per month for food, with similar but smaller increases across other categories. For cigarette smokers, this would mean an average increase of over 50% in their monthly food expenditure. Rural cigarette smokers would have an additional 9.3 taka, or over 50% additional money available for health care, and an urban cigarette smoker an additional 13.9 taka, or 34% more for education (percent increases not shown in table).

Utilizing the expected allocations of tobacco money across different expenses given in Table 4, we now calculate what food a man living in a rural or urban area could purchase, given the typical spending patterns shown.²⁶ For rural and urban men who use tobacco, food expenditure would be expected to increase by 94.5 and 75 taka per month, respectively. These figures are sufficient to purchase an additional 400 calories/day of fruit, vegetables, fish, and so on. For rural (198.2 taka/month) and urban (157.4 taka/month) men who smoke cigarettes, food values could easily double, to 800 calories/day of high-nutrient foods.

Each man giving up smoking and spending his money according to established patterns could add 400-800 calories to his children's diet, while also contributing significantly more to their health, education, clothing, housing, and other costs.

urban tobacco exp. allocated to food: 75 taka/month (additional 400 calories/day)

8,000 calories of rice = 35.2 taka
1,100 calories of greens = 6.9 taka
1,000 calories of lentils = 11.1 taka
1,000 calories of oil = 7 taka
800 calories of potatoes = 7.8 taka
200 calories of fish = 5.5 taka
100 calories of bananas = 1.2 taka

Total: 12,200 calories for 74.7 taka

rural cig. exp. allocated to food: 198.2 taka/month (additional 800 calories/day)

14,500 calories of rice = 63.8 taka
5,000 calories of lentils = 55.5 taka
1,500 calories of oil = 8.7 taka
1,000 calories of greens = 6.3 taka
650 calories of fish = 17.8 taka
600 calories of eggs = 19.6 taka
600 calories of milk = 19.9 taka
500 calories of banana = 6.1 taka

Total: 24,350 calories for 197.5 taka

urban cig. exp. allocated to food: 157.4 taka/month (additional 800 calories/day)

17,000 calories of rice = 74.8 taka
3,450 calories of lentils = 38.3 taka
1,800 calories of oil = 10.4 taka
1,100 calories of greens = 6.9 taka
350 calories of eggs = 11.4 taka
350 calories of milk = 11.6 taka
300 calories of banana = 3.6 taka

Total: 24,350 calories for 157.1 taka

rural tob. exp. allocated to food: 94.5 taka/month (additional 400 calories/day)

6,500 calories of rice = 28.6 taka
3,000 calories of lentils = 33.3 taka
1,000 calories of oil = 5.8 taka
900 calories of greens = 5.7 taka
200 calories of eggs = 6.5 taka
200 calories of milk = 6.6 taka
200 calories of fish = 5.5 taka
200 calories of banana = 2.4 taka

Total: 12,200 calories for 94.4 taka

²⁶ Distribution of money, but not food prices, are differentiated for rural and urban areas. Also, food costs are for 1995-1996; but since lower-cost foods than those used are available, and food prices do not rise consistently, or vary consistently between rural and urban areas, substitute food items would compensate for inflation and rural/urban price differentials.

Although we would not label various electric appliances as basic needs, it is interesting to compare the price of luxury items to that of cigarettes. Table 5 shows the percentage of households possessing various consumer goods, and the price of those goods in packs of BAT cigarettes.

Only a fourth of Bangladeshi households own a radio, an item which could be purchased with 12 packs of Gold Leaf or 6 packs of Benson & Hedges. Only one-tenth of households have an electric fan, which costs the same as 29 packs of Gold Leaf or 15 packs of B&H. For those who aspire to various consumer goods, quitting smoking would be one way of achieving those goals.

Who can afford an education?

Kanailal lives with his wife and two girls in a slum in Dhaka. His income is 2,500 to 3,500 taka a month, of which he spends 750 to rent a house of tin and bamboo. He spends 70-80 taka a day on food for his family: mostly rice and vegetables. Kanailal explained that his two daughters can't go to school, because they live in a slum and there is nowhere to send them. Neither can he afford their other basic needs. Kanailal smokes bidis and chews tobacco, spending 10-15 taka per day to maintain his habit. How much better would his family live if he spent the 300-450 taka a month for tobacco on a better home, food, or education for his daughters?

Table 5. Price of consumer goods relative to cigarettes.

<i>consumer item</i>	<i>% of households owning²⁷</i>	<i>price (taka)</i>	<i>price in packs of Gold Leaf regular*</i>	<i>price in packs of B&H*</i>
<i>radio</i>	24%	450	11.8	6.0
<i>black and white TV</i>	9% (includes color)	6,500	171.1	86.7
<i>color TV</i>		17,500	460.5	233.3
<i>cassette player</i>	8%	2,500	65.8	33.3
<i>electric fan</i>	10%	1,100	28.9	14.7
<i>electric iron</i>	6%	350	9.2	4.7
<i>refrigerator</i>	2%	18,500	486.8	246.7

* price in packs of Gold Leaf; one pack = 38 taka

** price in packs of Benson & Hedges; one pack = 75 taka

²⁷ Bangladesh Bureau of Statistics, *Analysis of Basic Needs Dimension of Poverty Volume III*. Dhaka: 1998, p. 64.

Section 5

Expenditure on tobacco versus food

Per person, more money is spent each day on tobacco than on milk. One pack of Gold Leaf regular cigarettes costs more than a dozen eggs.

The poorest households spend the highest proportion of their income on food: 66-73% (see Table 6). They are also the most likely to have malnourished children in their household. As spending on food increases, malnutrition decreases.²⁸ Thus, they would benefit the most by shifting their tobacco expenditures to food.

The minimum daily calorie requirement varies by age and sex, from 1,094 for children aged three and under, and 1,405 to children aged 4-6, to over 2,000 for adults (see Table 7). A significant portion of those calories could come from a re-allocation of tobacco expenditures.

Chart 13. Percent of total expenditures going to food by monthly household expenditure group, 1997

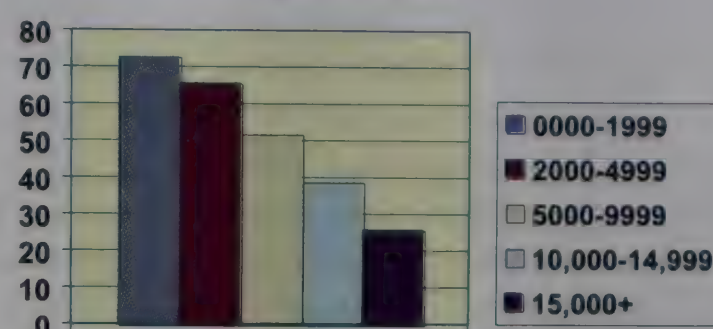


Table 6. Per capita monthly expenditure on food by monthly household expenditure group²⁹

Monthly household expenditure group	Percent of income spent on food
0000-1999	73%
2000-4999	66%
5000-9999	52%
10,000-14,999	39%
15,000+	26%
Rural	61%
Urban	48%
All groups	58%

Table 7. Per capita daily calorie requirement by age and sex³⁰.

Age group	Calorie requirement	
	Male	Female
0-3	1,094	1,094
4-6	1,405	1,405
7-9	1,784	1,784
10-12	2,413	2,172
13-17	2,671	2,327
18-29	2,782	2,544
30-59	2,707	2,297
60+	2,349	2,054

²⁸ Bangladesh Bureau of Statistics, *Child Nutrition Survey of Bangladesh 1995-96*. Dhaka: 1997, pp. 50-51.

²⁹ Bangladesh Bureau of Statistics, *Analysis of Basic Needs Dimension of Poverty Volume II*. Dhaka: 1997, p. 107. Figures not available for monthly household income group. However, for the poor, monthly expenditure is nearly as much as monthly income.

³⁰ Bangladesh Bureau of Statistics, *Analysis of Basic Needs Dimension of Poverty Volume III*. Dhaka: 1998, p. 104.

In Bangladesh, most of the calories consumed come from rice.³¹ Table 8 shows average daily expenditures for tobacco in 1995 for men and women who use it, by type of tobacco product, and the number of calories from rice that each sum could purchase.

The average expenditure on tobacco for men would purchase 721 calories of rice per day, and for women, 419. For bidis, the figures for men and women respectively are 372 and 302, for hukkas, 698 and 233, and for cigarettes, 1,837 and 2,837.

But people can not exist on rice alone. Nutritious foods that are more expensive than rice, and thus less commonly consumed, would be highly beneficial to malnourished children or adults. **The money a typical male smoker spent each day to buy cigarettes could buy an additional 800 calories of a variety of foods including lentils, eggs and milk for his children.**

An additional 400 calories/day would provide 37% of the daily calorie requirement of a child aged 3 or under. An additional 800 calories could supplement the diets of two children. If the money were spent on rice alone, about 87% of one adult's daily caloric need could be met.

The average daily expenditure on tobacco for men in 1995 was just 3.1 taka, or 21.7 taka per week. But even such a small amount was sufficient to pay for an additional 400 calories/day from a range of nutritious foods. **Even the smaller amount that the typical woman spent per day on tobacco (1.8 taka) in 1995 was sufficient to add 200 calories/day of a variety of foods to her children's diet.**

Table 8. Average daily expenditure on tobacco, 1995.³²

Type of tobacco	Average expenditure on tobacco (taka)		Equivalent in calories of rice ³³	
	Male	Female	Male	Female
Average for all types of tobacco	3.1	1.8	721	419
Bidi	1.6	1.3	372	302
Cigarettes	7.9	12.2	1,837	2,837
Hukka	3.0	1.0	698	233

men's cigarette expenditure: 7.9 taka/day (55.3/week):

800 additional calories/day

2,000 calories of lentils = 17.4 taka

1,000 calories of oil = 5.8 taka

900 calories of rice = 3.9 taka

700 calories of greens = 4.3 taka

350 calories of eggs = 11 taka

350 calories of banana = 3.8 taka

300 calories of milk = 9 taka

Total: 5,600 calories for 55.2 taka

men's tobacco expenditure: 3.1 taka/day (21.7/week):

400 additional calories/day

800 calories of rice = 3.4 taka

800 calories of lentils = 7 taka

400 calories of oil = 2.3 taka

400 calories of greens = 2.5 taka

300 calories of banana = 3.2 taka

100 calories of eggs = 3.1 taka

Total: 2,800 calories for 21.6 taka

women's tobacco: 1.8 taka/day (12.6/week):

200 additional calories/day

550 calories of lentils = 4.8 taka

350 calories of oil = 2 taka

200 calories of greens = 1.2 taka

100 calories of rice = 0.4 taka

100 calories of milk = 3 taka

100 calories of banana = 1.1 taka

Total: 1,400 calories for 12.6 taka

³¹ Bangladesh Bureau of Statistics, *Analysis of Basic Needs Dimension of Poverty Volume III*. Dhaka: 1998, p. 10.

³² Bangladesh Bureau of Statistics, *Prevalence of Smoking in Bangladesh*, Dhaka: 1996, p. 12.

³³ The figure for rice is calculated using the price in 1995 of 4.3 taka for 1,000 calories of rice, Bangladesh Bureau of Statistics, *Statistical Pocketbook Bangladesh 1998*. Dhaka: 1999, p. 376.

The most heavily-advertised cigarettes on billboards and in large-circulation newspapers are Gold Leaf and Benson & Hedges. Some of the cheaper brands, such as Navy, are also heavily advertised. The men shown in cigarette ads are always strong, healthy, and well-fed. The ads suggest that rather than harming one's health, cigarettes will make you stronger.

Table 9 gives the year 2000 prices of various foods, and Table 10 of popular brands of cigarettes. Cigarette prices vary considerably, from four taka for a pack of Sun Moon to 75 taka for a pack of Benson & Hedges. By comparison, a pack of bidis costs three taka.

Even the cheap cigarettes are expensive when compared to foods. In Table 11, we compare the price of food to that of cigarettes. A pack of Gold Star costs more than an egg. **A pack of Navy costs almost as much as a liter of milk. Less than two packs of Scissors would pay for a kilogram of lentils.** One and a half packs of Senor Gold would purchase a dozen bananas, and 1.6 packs would buy one kilogram of rice. Less than two packs of Navy would pay for a liter of soybean oil.

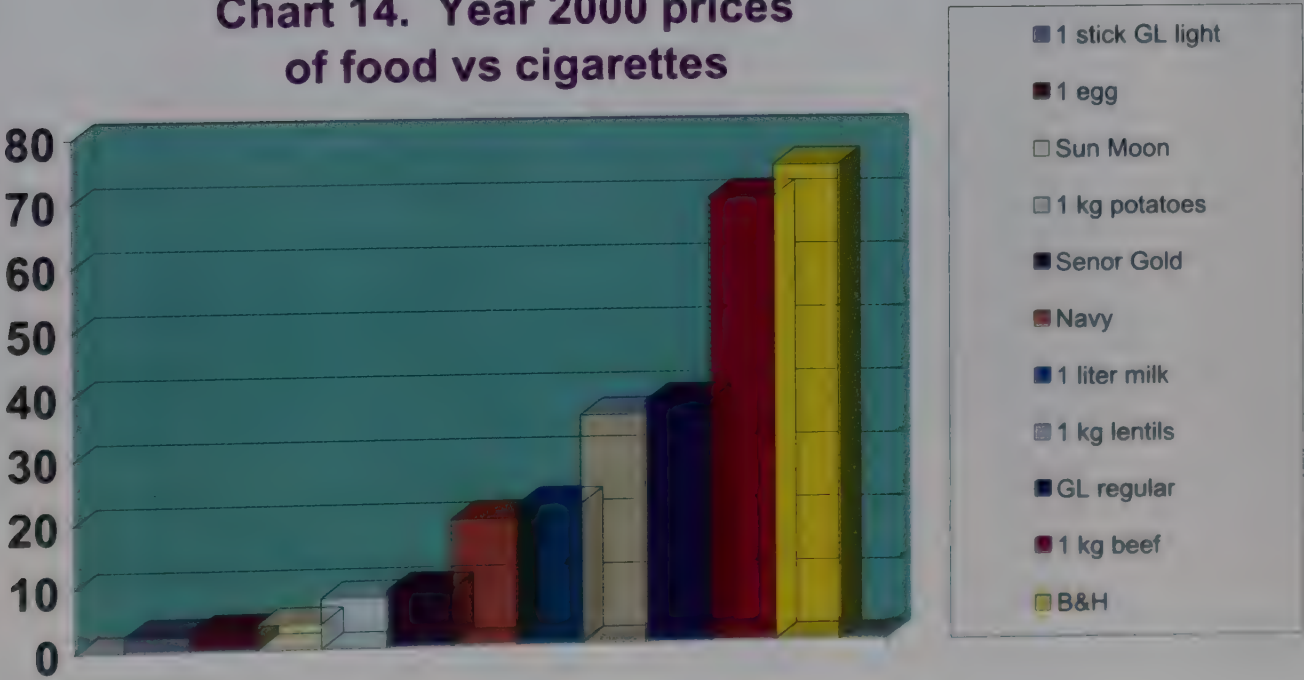
Table 9. Prices of various food items, Dhaka, April 2000

Food items	Unit	Cost (taka)
Eggs	1 egg	3
Potatoes	1 kg	8
Milk	1 liter	22
Lentils	1 kg	36
Beef	1 kg	70
Small bananas	1 dozen	14
Dark leafy greens	1 kg	7
Soybean oil	1 liter	36
Rice	1 kg	14

Table 10. Prices of various cigarette brands, Dhaka, April 2000

Cigarettes	# of sticks	price (taka)
Gold Leaf regular	1	2
Gold Leaf light	1	2.5
Sun Moon, Gold Star, Good Leaf	10	4
Senor Gold	10	9
Scissors, Star, Navy	20	20
Gold Leaf regular	20	38
Gold Leaf light	20	47
555	20	68
B&H	20	75

Chart 14. Year 2000 prices of food vs cigarettes



As for Gold Leaf, the figures are even more dramatic. One and a half regular cigarettes or 1.2 sticks of light would purchase an egg. Three and a half sticks of regular would buy 1 kg of dark leafy greens. Four sticks of regular would purchase a kilogram of potatoes, 7 sticks would pay for a dozen bananas or a kilogram of rice, and 11 sticks would buy a liter of milk. A pack of Gold Leaf light could pay for 3.4 dozen small bananas, 6.7 kg of leafy greens, 1.3 liters of soybean oil, or 3.4 kg of rice. *With 38 taka—a few hours' wage for a rickshaw puller—one could buy half a kilogram of beef, five and a half kilograms of dark leafy greens, over a kilogram of lentils, a dozen eggs, or one pack of John Player Gold Leaf regular cigarettes.*

For those buying cheaper tobacco, one taka for a cigarette may sound insignificant. But when people become addicted and begin to need several cigarettes a day, the price quickly escalates. A smoker of a pack a day of Star or Scissors spends 20 taka each day, or over 600 taka each month. If he spent 70% of that money on food instead, he could easily add 800 calories *each day* to his family's diet, in the form of lentils, potatoes, fish, beef, and dark leafy greens.

Table 12 compares per capita monthly expenditure for tobacco to that for lentils, meat, leafy vegetables, oil/fats, and milk. Per capita expenditure for tobacco—averaged over the whole population, not just those who use tobacco—is 7.9 taka/month in rural areas and 14.7 taka/month in urban areas, with a national average of 8.7 taka/month.

70% of the cost of a packet of Star a day: 20 taka x 30.5 days*0.7 = 427 taka/month (year 2000 prices)
 10,600 calories of lentils = 111.4 taka
 6,300 calories of potatoes = 56.7 taka
 5,600 calories of fish = 159.9 taka
 1,400 calories of beef = 86 taka
 500 calories of greens = 12.9 taka
Total: 24,400 calories for 426.9 taka

Where will the money come from?

Hasan, a rickshaw puller, estimates that he spends about 10 taka/day on cigarettes and bidis. When asked if his three children ever eat eggs, he exclaimed, "Eggs? Where will the money come from to buy them?" If Hasan didn't buy tobacco, each of his children could eat an egg a day, or other high-quality foods, and the whole family would be healthier as a result. The unattainable could become a reality for this poor rickshaw puller's children

Table 11. Food for cigarettes, in year 2000 prices³⁴

Food items	Number of packs of various cigarette brands needed to purchase each food item	# of sticks of Gold Leaf needed to buy food *		Food that could be bought for one pack of Gold Leaf	
		Regular	Light	Regular	Light
1 egg	0.75 pack Gold Star	1.5	1.2	12.7 eggs	15.7 eggs
1 kg potatoes	2 packs Sun Moon	4	3.2	4.8 kg	5.9 kg
1 liter milk	2.4 packs Senor Gold or 1.1 packs Navy	11	8.8	1.7 liters	2.1 liters
1 kg lentils	1.8 packs Scissors	18	14.4	1.1 kg	1.3 kg
1 kg beef	3.5 packs Star or 1.03 packs B&H	35	28	0.5 kg	0.7 kg
1 dozen small bananas	1.5 packs Senor Gold or 0.7 packs Scissors	7	5.6	2.7 dozen	3.4 dozen
1 kg puishak (dark leafy green vegetable)	0.7 packs Senor Gold or 1.75 packs Good Leaf	3.5	2.8	5.4 kg	6.7 kg
1 liter soybean oil	4 packs Senor Gold or 1.8 packs Star	18	14.4	1.1 liters	1.3 liters
1 kg rice	3.5 packs Sun Moon or 1.6 packs Senor Gold or 0.7 packs Scissors	7	5.6	2.7 kg	3.4 kg

*Calculated as price/stick as sold in stores, rather than as a fraction of the pack, as many people buy cigarettes one stick at a time.

³⁴Prices collected at New Market, Dhaka. Food prices in rural areas would be lower.

Per capita monthly expenditure for tobacco is higher in both rural and urban areas than that for milk, and higher in urban areas than for leafy green vegetables. People spend nearly as much in

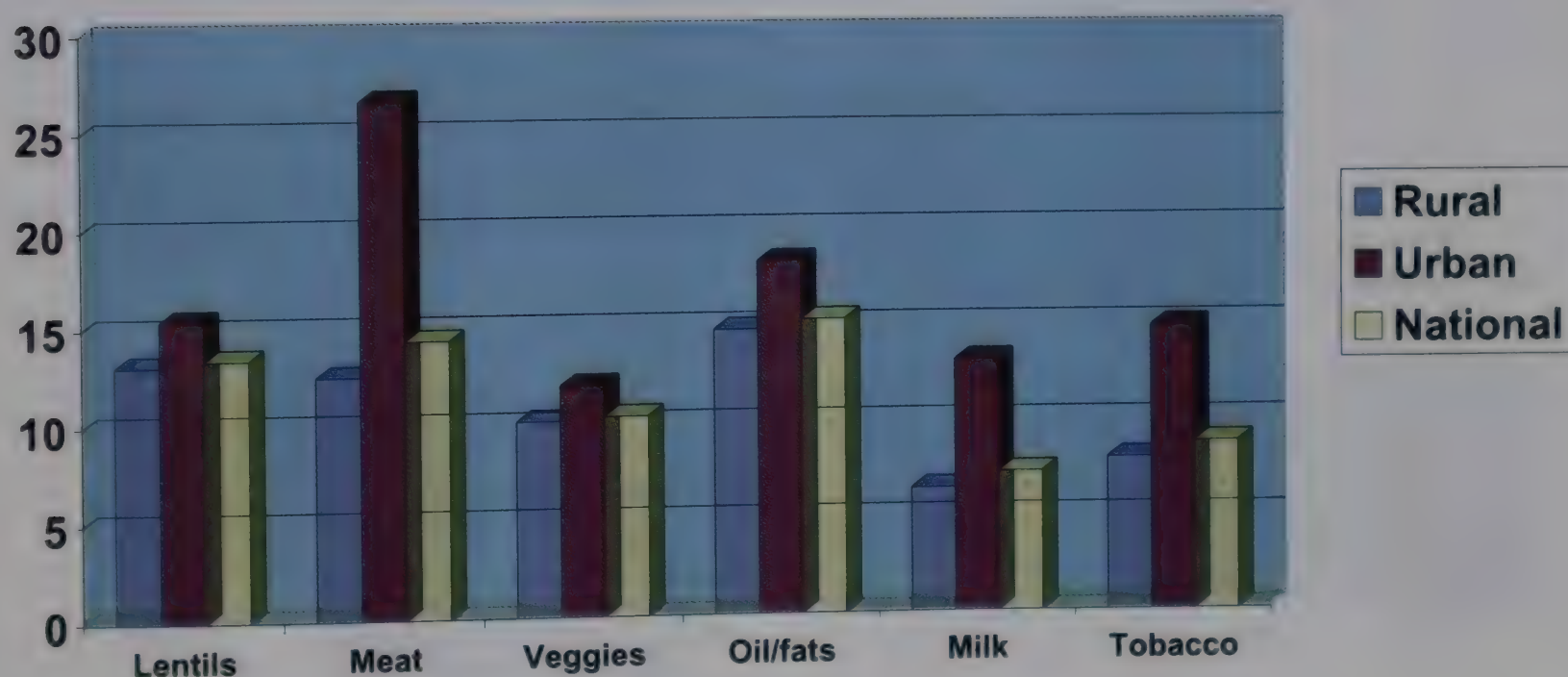
cities for tobacco as for lentils. **Nationally, for each of the high-nutrient foods shown, tobacco expenditures represent more than half the expenditures for food.**

Table 12. 1997 per capita monthly expenditure³⁵

	tobacco	lentils		meat		leafy vege		oil/fats		milk	
	taka	taka	%	taka	%	taka	%	taka	%	taka	%
rural	7.9	13.1	60.3%	12.5	62.9%	10.1	78.0%	14.7	53.6%	6.4	122.7%
urban	14.7	15.4	95.6%	26.6	55.3%	11.9	123.4%	18.2	80.6%	13.0	113.3%
national	8.7	13.4	65.3%	14.3	61.2%	10.3	84.4%	15.2	57.5%	7.2	120.6%

Note: Under each food item, the first column represents per capita monthly expenditure for that item. The second column represents per capita tobacco expenditure as a percentage of that food item.

Chart 15. Monthly per capita expenditure on tobacco vs food items (taka), 1997



³⁵ Bangladesh Bureau of Statistics, *Analysis of Basic Needs Dimension of Poverty Volume II*. Dhaka: 1997, p. 130. As elsewhere, unrounded figures used in calculations.



Section 6

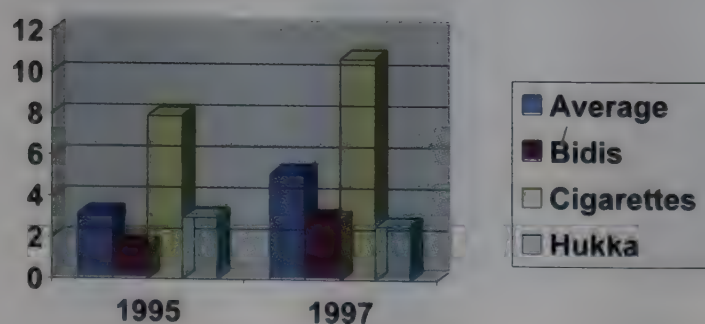
Trends in consumption of tobacco versus food and other basic needs

During the year 1992, people consumed on average 17 eggs and 100 cigarettes. Three years later, egg consumption had dropped to 12 per person per year, while cigarettes had increased to 133.

As shown in Table 1, poverty worsened in urban areas from 1991-1996³⁶, though it improved slightly in rural areas. Since most of the population lives in rural areas, this indicates a small improvement over time in the general population. Presumably that improvement could have been greater, and the decline in urban areas reduced, if people had consumed less tobacco and more food. **We believe that development gains over the past several years have been significantly offset by diversion of income to tobacco.**

Figures for average tobacco expenditures in 1997 are shown in Table 13. Comparing the 1997 figures for those for 1995 in Table 6 above demonstrates that the general trend is towards increasing expenditures for tobacco.

Chart 16. Men's average expenditure on tobacco (taka/day)



While the average expenditures for bidis were 1.6 and 1.3 taka/day respectively for men and women in 1995, they had risen to 2.9 and 3.3 in 1997. Women's expenditure on cigarettes fell from 12.2 to 6.8, while men's rose from 7.9 to 10.7. Expenditures for tobacco in general rose from 3.1 to 5.1 for men, and from 1.8 to 2.8 for women.

Meanwhile, the price of rice fell. While the average male smoker could have purchased an additional 1,837 calories of rice with his cigarette money in 1995, the figure rose to 2,942 calories in 1997. The average male tobacco user in 1997 could easily have purchased 750 additional calories each day from his tobacco money.

possible purchase for men's 1997 tobacco expenditure:

5.1 taka/day (35.7/week):

750 additional calories/day

2750 calories of rice = 11.8 taka

1200 calories of oil = 7 taka

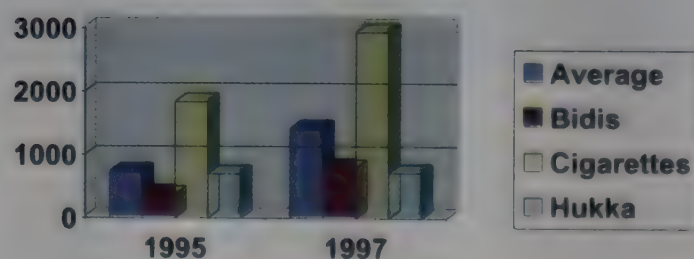
500 calories of lentils = 4.4 taka

500 calories of greens = 3.1 taka

300 calories of eggs = 9.4 taka

Total: 5,250 calories for 35.7 taka

Chart 17. Equivalent in rice calories of men's tobacco expenditures



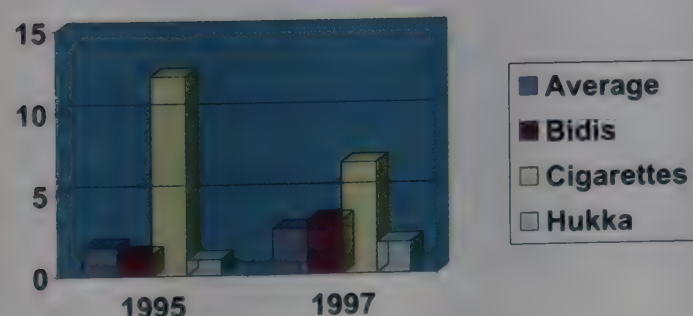
³⁶ Figures are not available for more recent years.

For women smoking bidis (women are about 6 times more likely to smoke bidis than cigarettes³⁷), the figure tripled, from 302 calories in 1995 to 907 in 1997. The potential in calories of rice for the average tobacco user nearly doubled for both men and women, from 721 and 419 respectively in 1995, to 1,402 and 770 calories in 1997.

While spending on tobacco—and the food value of the money thus spent—increased, consumption of many major food items decreased over several years, as shown in Table 14.

One of the biggest increases in the period was in cigarettes—a 33% increase over the 3-year period. A similar increase occurred in the consumption of cabbage (though only from 0.6 kg/person/year to 0.8) and to a lesser degree of milk and fish, while per capita consumption of many other items increased only slightly, or even declined. Rice, the staple of the Bangladeshi diet, increased by only 1% over the period, while banana consumption dropped by six percent and eggs by 29%.

Chart 18. Women's average expenditure for tobacco (taka/day)

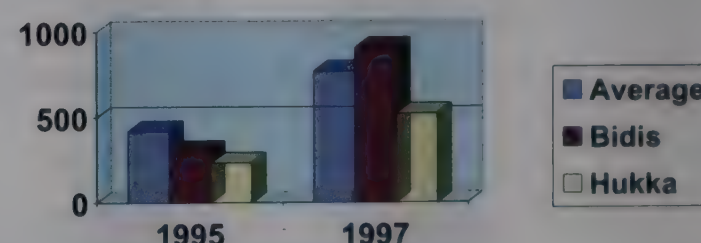


³⁷ Bangladesh Bureau of Statistics, *Prevalence of Smoking in Bangladesh*, Dhaka: 1996, p. 12.

Table 13. Average daily expenditure for tobacco and equivalent in calories of rice, by sex and type of tobacco, 1997³⁸

Type of tobacco	Average expenditure on tobacco (taka)		Equivalent in calories of rice ³⁹	
	Male	Female	Male	Female
Average for all types of tobacco	5.1	2.8	1,402	770
Bidi	2.9	3.3	797	907
Cigarettes	10.7	6.8	2,942	1,869
Hukka/pipe etc.	2.6	1.9	715	522

Chart 19. Equivalents in rice calories of women's tobacco expenditures (cigarettes excluded)



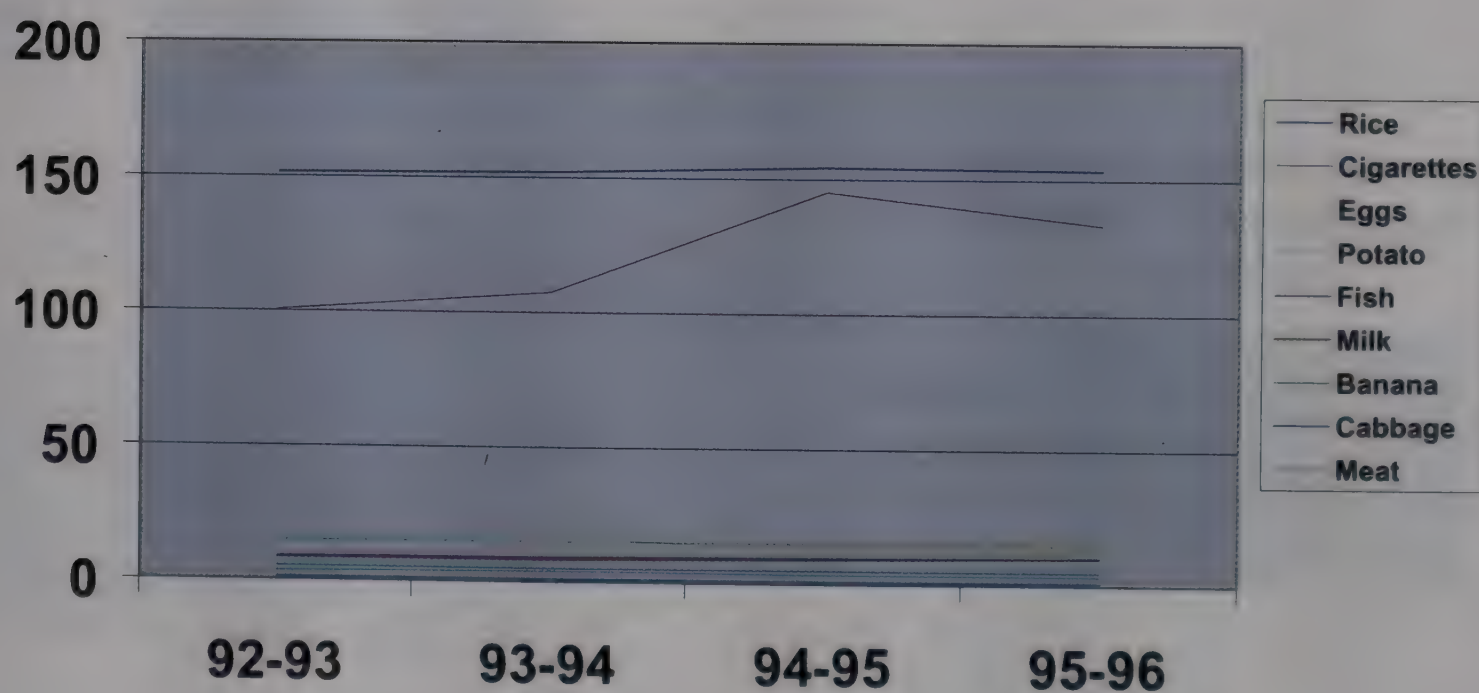
³⁸ Bangladesh Bureau of Statistics, *Statistical Pocketbook Bangladesh 1998*. Dhaka: 1999, p. 366.

³⁹ The figure for rice is calculated using the 1997 price for coarse rice, in Dhaka (the price is lower in the other cities). While it cost 4.3 taka for 1,000 calories of rice when the price per kilogram was 14.73 taka (1995/96), it would cost only 3.6 taka for the same 1,000 calories in 1996/97, as the price fell to 12.46 taka per kg. Unrounded figure for price of rice used in calculation. Price of rice over time from Bangladesh Bureau of Statistics. *Statistical Pocketbook Bangladesh 1998*. Dhaka: 1999, p. 313.

Table 14. Per capita consumption of selected food items and tobacco⁴⁰

Item	Unit	1992-93	1993-94	1994-95	1995-96	% change 1992-96
Rice	kg	151.3	151.8	154.1	153.4	+1%
Potato, sweet potato	kg	14.9	15.0	15.0	14.9	0%
Meat	kg	3.4	4.2	3.6	3.7	+9%
Fish	kg	8.4	9.0	9.5	10.0	+19%
Milk	liter	8.1	8.0	9.0	10.1	+25%
Eggs	no.	17.0	16.0	12.0	12.0	-29%
Banana	kg	5.2	5.0	5.0	4.9	-6%
Cabbage	kg	0.6	0.7	0.7	0.8	+33%
Cigarettes	sticks	100	107	145	133	+33%

Chart 20. Change in per capita consumption of cigarettes and selected foods, 1992-96



⁴⁰ Bangladesh Bureau of Statistics, *Statistical Pocketbook Bangladesh 1998*. Dhaka: 1999, pp. 385-6, 388.

What if over the same period, cigarette consumption had remained at 100 sticks/capita? What if cigarettes had not been purchased at all? Table 15 gives the equivalent in food (kg of rice or meat, liters of milk, or number of eggs) and the percentage of actual purchases (in parentheses) that could have occurred in the yearly totals, if the cigarette money had gone to that food item.

If cigarette consumption per capita in 1994-1995 had remained the same as in 1992-1993, and the money that was spent on cigarettes in

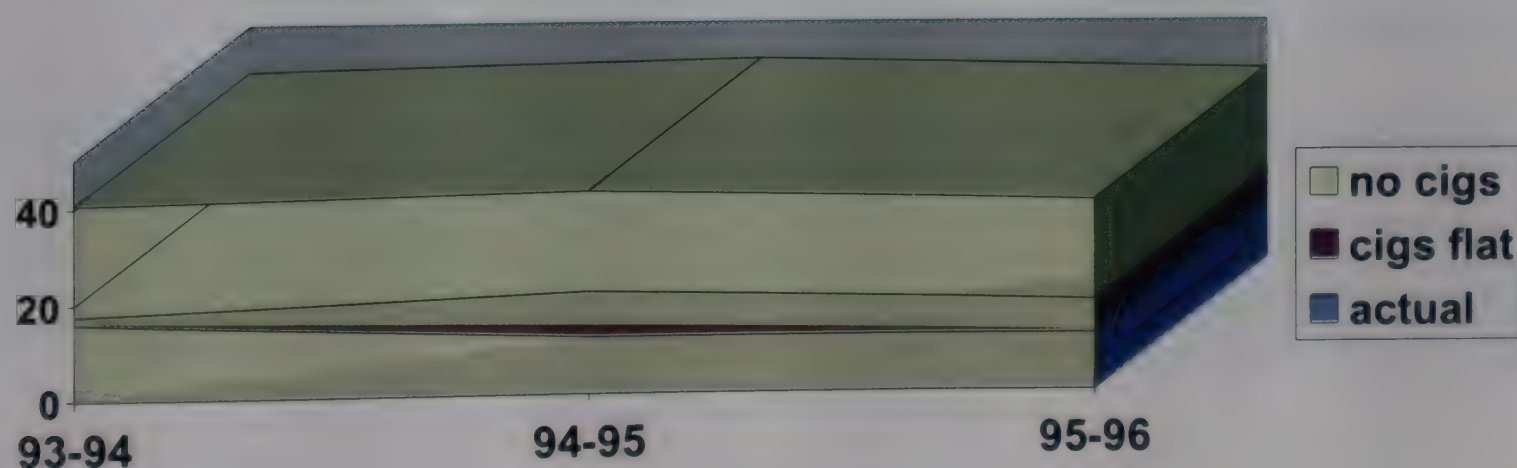
that year had gone to food, Dhaka residents could have consumed almost 15% more meat, 14% more milk, or 79% more eggs. Reallocating all expenditures just from the increase in cigarette consumption to eggs would have increased egg consumption in 1994-95 from 12 eggs per person per year to 21.5, whereas reallocating all cigarette expenditures to eggs would have raised the total to 42.6 eggs/person/year.

Table 15. Per capita consumption of various food items in Dhaka by year, and increase in quantity and change in percentage of yearly total (in parentheses) of each food item if cigarettes not purchased⁴¹

Item	Unit		cigarette equivalent			cigarette equivalent			cigarette equivalent	
			7 sticks	107 sticks		45 sticks	145 sticks		33 sticks	133 sticks
Meat	kg	4.2	0.1 (102%)	1.2 (129%)	3.6	0.5 (115%)	1.7 (147%)	3.7	0.4 (110%)	1.6 (142%)
Milk	litre	8.0	0.2 (103%)	3.0 (138%)	9.0	1.3 (114%)	4.0 (145%)	10.1	1.0 (109%)	3.8 (138%)
Eggs	no.	16.0	1.6 (110%)	24.7 (255%)	12.0	9.5 (179%)	30.6 (355%)	12.0	7.0 (158%)	28.1 (334%)

Note: Calculations use national per capita consumption of food and cigarette items, and Dhaka prices of all items. For price of cigarettes over the period, Star was used, as the cheapest cigarette given. The price of one stick of Star was 0.7 taka throughout the period in Dhaka, and 0.8 taka in Rajshahi. Prices are for superior quality beef and medium quality rice, as price for coarse on (used elsewhere) is not given for Rajshahi.

Chart 21. Potential change in annual per capita egg consumption, Dhaka



⁴¹ Per capita consumption (nationally) and prices of foods and cigarettes in Dhaka and Rajshahi from Bangladesh Bureau of Statistics. *Statistical Pocketbook Bangladesh 1998*. Dhaka: 1999, pp. 313-316, p. 385.

Even more marked changes are seen in Rajshahi, where over the same period cigarette prices were higher and food prices lower than in Dhaka. In Rajshahi, if per capita cigarette consumption levels had remained as in 1992-93, then in 1994-95 people could have consumed 20% more meat, 27% more milk, or 97% more eggs. Eliminating cigarette consumption and spending that money on eggs could have led to more than a quadrupling of egg consumption per capita in 1995-96, from 12 to 49.6 eggs per person per year.

As the economy of Bangladesh improves, people cannot afford to spend their additional money on tobacco rather than food. If the country is to show strong gains in nutrition and health status, then people must be encouraged to spend their money in positive ways, and tobacco companies must not be allowed to advertise their products freely to an uneducated public.

Chart 22. Potential change in annual egg consumption, Rajshahi

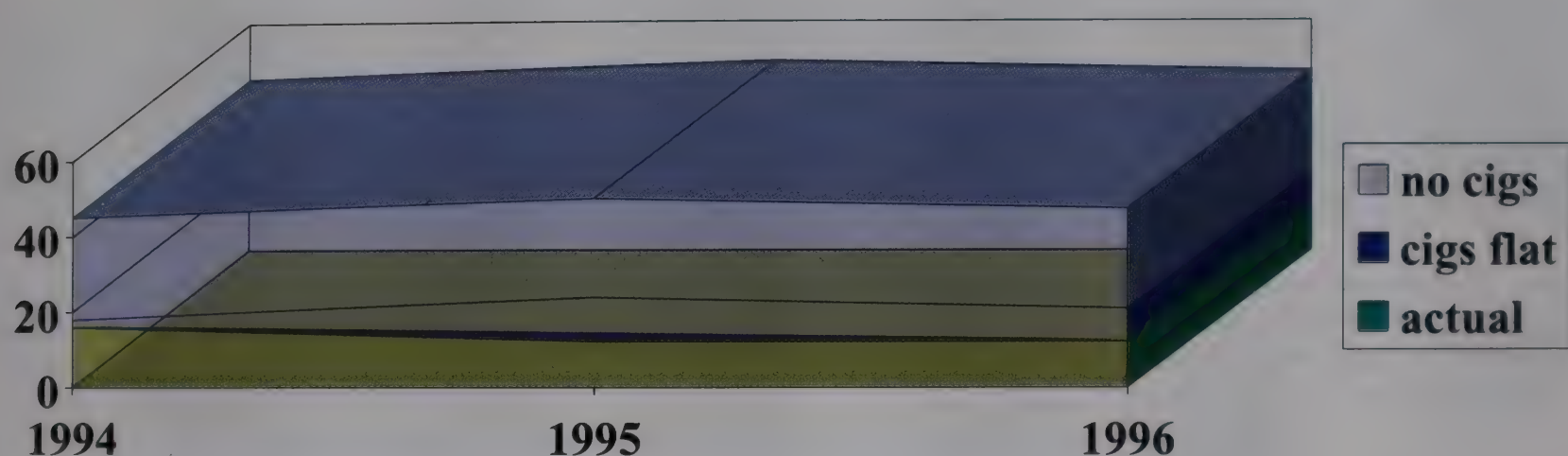


Table 16. Per capita consumption of various food items in Rajshahi by year, and increase in quantity and percentage of yearly total (in parentheses) of each food item if cigarettes not purchased⁴²

Item	Unit	93-94	cigarette equivalent		94-95	cigarette equivalent		95-96	cigarette equivalent	
			7 sticks	107 sticks		45 sticks	145 sticks		33 sticks	133 sticks
Meat	kg	4.2	0.1 (102%)	1.6 (137%)	3.6	0.7 (120%)	2.3 (164%)	3.7	0.5 (114%)	2.1 (157%)
Milk	litre	8.0	0.4 (105%)	5.6 (170%)	9.0	2.5 (127%)	8.0 (189%)	10.1	1.7 (117%)	6.8 (167%)
Eggs	no.	16.0	1.9 (112%)	29.1 (282%)	12.0	11.7 (197%)	37.6 (413%)	12.0	8.7 (172%)	34.9 (391%)

See note to Table 15.

⁴² Bangladesh Bureau of Statistics, *Statistical Pocketbook Bangladesh 1998*. Dhaka: 1999, pp. 313-316, p. 385.

Section 7

Tobacco and malnutrition

How many millions of people would have enough to eat if the poor spent their money on food rather than tobacco? How many thousands fewer children would die each year?

The consequences of malnutrition are manifold. Malnutrition contributes to more than half of all deaths of children under age five in developing countries. For those who survive, lifelong impairment can result, including poor physical and mental ability, more illness, and little ability to be economically productive. UNICEF estimates that Bangladesh loses the equivalent of more than 5% of its gross national product in lost lives, disability, and productivity caused by malnutrition.⁴³ Malnutrition is blamed for the deaths of over 700 children under age 5 *each day* in Bangladesh.⁴⁴ In 1995-96, more than half (59.7%) of Bangladeshi children aged 6-71 months were malnourished.⁴⁵

Nearly twenty years ago, a researcher suggested that if the condition of malnourished children deteriorated “as a result of income being used for smoking rather than for food, then each year the prospects of survival of some 18,000 children would be halved. Should these estimations be anywhere near correct, the nutrition-mediated effects of smoking, in terms of chronic undernutrition as well as survival, are likely to be far more important than the direct consequences of smoking on health.”⁴⁶ The situation has only worsened since.

As shown above in Table 6, those with a monthly expenditure of less than 2,000 taka/month spend 73% of that money on food, whereas the figure

for those with a monthly expenditure of 2,000-4,999 is 66%. This averages out to over 69% of household monthly expenditure going to food. Nearly 78% of calories in the Bangladesh diet are supplied by cereals, while 6% come from vegetables, over 4% from oil, 7% from lentils, fish, meat, fruits, and milk combined, and 4.6% from other foods.⁴⁷ We can therefore assume that the poor would spend most of their increased food budget on rice, while smaller numbers of calories of less commonly consumed foods could have a huge impact on children's diet.

As shown above, the average male tobacco user in 1997 could purchase 750 calories/day of various foods with his daily tobacco expenditure, or 1,400 calories each day if he spent the money on rice alone. Even if he used only 69% of his tobacco money—that is, allocated the money previously spent on tobacco according to the typical pattern of the poor—he could still purchase 517 calories worth of various foods, or over 960 calories of rice. The average female tobacco user could purchase 770 calories of rice with the full sum, or 530 calories with 69% of it.

As we saw in Table 1, half of the poor consume between 1805 and 2122 calories per day. For this group, 400 additional calories or less per day would bring them into sufficiency. For those consuming less than 1805 calories, more than 400 additional calories are needed. In either case, the average tobacco user could provide sufficient calories to cross the poverty line as measured by caloric intake. This means that each tobacco user represents one or more people—whether the smoker or his or her child—who is needlessly going hungry.

⁴³UNICEF, *The State of the World's Children 1998*. Oxford and New York: Oxford University Press for UNICEF, 1998, p.13.

⁴⁴“Over 700 children dying everyday, claims NFB study.” *The Bangladesh Observer* Saturday, April 29, 2000.

⁴⁵Bangladesh Bureau of Statistics, *Child Nutrition Survey of Bangladesh 1995-96*. Dhaka: 1997, p. 26.

⁴⁶Nicholas Cohen, “Smoking, Health, and Survival: Prospects in Bangladesh.” *The Lancet* May 16, 1981, pp. 1090-93.

⁴⁷ Bangladesh Bureau of Statistics, *Analysis of Basic Needs Dimension of Poverty Volume III*. Dhaka: 1998, p. 10.

Calculations of the number of poor smokers in Bangladesh are shown in Tables 17 (men) and 18 (women). To calculate the number of poor males in each age group, the figure from Table 1 of 47% for rural poverty is used, since about 80% of the population is rural. The actual figure would be slightly higher, given the higher rate of poverty among the urban population.

The percentage of poor men by age group who smoke utilizes the rates for those with a monthly household income of less than 3,000 taka—the category into which 40% of Bangladeshi households, and presumably most poor families and malnourished children, fall. The calculation is slightly different for women, as breakdowns of

the percent of poor women who smoke by age group is not available, but as with men, the rates are likely to be even higher among poorer women.

The figures yield a total of 9.87 million poor male smokers and 612,000 poor female smokers aged 15 and over, for a total of over 10.48 million poor smokers, each of whom, if they redirected 69% of their tobacco expenditures to food, could add over 500 calories each day to their or their children's diet. Given increases in population, smoking, and expenditure on tobacco, the figure for the year 2000 would likely be significantly higher.

Table 17. Estimated number of poor male smokers, 1996

age	male population by age group ⁴⁸	number below poverty line (previous column*47)	% of poor who smoke, by age group ⁴⁹	number of poor smokers (applying % shown in previous column)
15-19	5,979,000	2,810,130	18.1	508,165
20-34	14,695,000	6,906,650	57.3	3,958,662
35-49	9,620,000	4,521,400	72.4	3,274,247
50+	8,028,000	3,773,160	56.5	2,131,207
total	38,322,000	18,011,340		9,872,281

Table 18. Estimated female population by age and smoking rates, 1996⁵⁰

age	population	smoking rates (%)	number of smokers	number of poor smokers (previous column*.47)
15-19	5,826,000	0.9	52,434	
20-34	14,161,000	3.3	467,313	
35-49	8,853,000	6.6	584,298	
50+	7,079,000	2.8	198,212	
total 15+	35,919,000		1,302,257	612,060

⁴⁸Bangladesh Bureau of Statistics, *Statistical Pocketbook Bangladesh 1998*. Dhaka: 1999, p. 151.

⁴⁹Bangladesh Bureau of Statistics, *Prevalence of Smoking in Bangladesh*, Dhaka: 1996, p. 10. Statistics are broken down into income categories, with the highest income given as 5,000+. We averaged the figures for the six income categories representing less than 3,000 taka/household/month.

⁵⁰Bangladesh Bureau of Statistics, *Statistical Pocketbook Bangladesh 1998*. Dhaka: 1999, p. 151.

Given that about half of those who are under the poverty line are under the hard-core line of less than 1805 calories/day, about half of those saved from malnutrition would be saved from severe food shortage.

If the poor stopped using tobacco and re-allocated their tobacco expenditures to other items, following the typical pattern for the poor, then in the year 2000, almost 10.5 million fewer people would be malnourished, about half of whom had been below the “hard-core” poverty line.

What about deaths averted? As mentioned above, 700 children under age five are estimated to die each day in Bangladesh from malnutrition. The rates of smoking among the poorest are over 50%. An additional 500 calories per day could easily be enough to save a malnourished child from death.

We estimate that over 350 young children per day could be saved from death by malnutrition, if their parents redirected some of their tobacco money to food. This translates to 127,750 fewer deaths of children under age 5 per year.

*I can't afford good food
for my children*

Mahmud Ali is a 40-year-old rickshaw puller living in Dhaka. His wife, three sons, and daughter reside in the countryside. He sends them money home out of his daily income of 120-150 taka. Since he has little money, his family eats only rice and vegetables. Meanwhile, he smokes 6-7 Star cigarettes a day, at one taka per cigarette, and spends an additional 4-5 taka per day on chewing tobacco, or a total of 10-12 taka/day—almost 10% of his income. Mahmud said that he would like to quit, and spend the 300-360 taka/month savings on his children.

Section 8

Conclusions and BATA Recommendations

The Bangladesh Anti-Tobacco Alliance (BATA) recommends banning advertising, raising taxes, and providing protection to non-smokers, so as to reduce the economic toll of tobacco consumption.

More research on this issue could help define the scale of the problem, and update the figures for the current year. However, the evidence presented here is already sufficient to take action. Future research could focus on understanding the effects of various tobacco control policies, after they are enacted, in achieving their desired aim of reducing tobacco use. Research could also focus on understanding what is needed to help the poorest to quit smoking, and in understanding how best to reach groups in which consumption is not declining.

Why focus on tobacco? Certainly it is not the only way in which people waste money. Lottery tickets, other forms of gambling, alcohol and other drugs, and prostitution also eat into the scarce resources of the poor, and, particularly in the case of alcohol and prostitution, can have other, serious effects on the health and wellbeing of the individual and his family.

What is different about tobacco? Unlike the other items mentioned,⁵¹ tobacco is heavily advertised in Bangladesh. The tobacco companies are given free rein to target the poor, with no more by way of warning than the tiny message on the side of the pack and similarly small warnings on billboards, newspapers, and satellite television ads.

The warnings merely state that tobacco harms the health. Even if the more than half the population that is illiterate have absorbed the message, as research indicates they have, what do they understand by it? While over 90% of men and about 85% of women say that “smoking is bad for health” (the same message as on the pack), less than half of smokers know that smoking causes cancer, and less than 17% of smokers know that it causes heart disease. For other diseases, the figure was 4.6% for male smokers and 3.2% for female smokers.⁵² So much for informed choice.

The study did not ask about addiction, but we can only assume that the addictive nature of tobacco is not well understood either, particularly by young smokers. The difficulty with addiction is that what began as a choice—though by no means an informed one, given the lack of basic knowledge of the harms caused by tobacco—becomes a behavior that is difficult, often extremely so, to stop.

Tobacco is sold and consumed almost everywhere. It is a drug of easy availability and social acceptability. By not passing strong legislation to control it—to make it more expensive, to greatly reduce the number of places in which it can be consumed, and to stop the promotion of it—the government is seen to condone it.

Since tobacco consumption constitutes such a large economic burden for poor families, shouldn't tobacco prices be kept low, so that people will waste less money on their habit? If the price of anything is to be kept low, it should

⁵¹Alcohol is only legally sold to foreigners, and is not advertised. In other countries, certain tobacco control policies—such as high taxation and a comprehensive ban on promotion/sponsorship—could be applied to alcohol as well, and thus further reduce the diversion of income for the poor away from food to addictive drugs.

⁵²Bangladesh Bureau of Statistics, *Prevalence of Smoking in Bangladesh*, Dhaka: 1996, p. 12.

be of food, education, or other essential goods. Low prices encourage more people to consume tobacco. The poor rarely eat meat, because it is expensive. Tobacco is perceived as cheap, and users may become addicted before they discover its actual cost. High prices discourage people from starting and encourage others to quit. One of the best ways to keep the young from becoming addicted, and to help the poor to quit, is thus to raise the price of tobacco products.

The tobacco companies argue that high taxes are regressive; that is, that they disproportionately target the poor. It is true that rates of tobacco use are higher in the poor. It is also true that they can least afford to pay more for their products. However, a tax rise that causes the highest-priced cigarettes to rise significantly more than the lower-cost ones would decrease the "unfairness" of the tax. Meanwhile, the goal of the tax is for tobacco to become less affordable to the poor. The young and the poor are most responsive to price changes, and thus most likely to avoid tobacco if the price increases. It is no service to the poor to continue to encourage them to become addicted on tobacco products, by allowing advertising and maintaining a low price. When the poor—those most likely to smoke—smoke less, industry profits decline. That is why the tobacco companies balk at any move that will discourage the poor from purchasing cigarettes.

Concern about harming the poor is due to the addictive nature of tobacco, and to the fact that it is often the non-consumers of tobacco—the wives and children of smokers—who suffer most when income is diverted from their basic needs. But since wives and children also suffer when they are exposed to tobacco smoke, and are already suffering due to income diversion, the solution is not to make the product cheaper and thus encourage people to smoke more. We have already seen the tremendous increase in per capita consumption of cigarettes from 1992-1996. As living standards increase, if tobacco products remain the same price, then they actually become more affordable, and thus more popular, over the years. Despite—or in fact due to—tobacco prices remaining fairly stable in Bangladesh, per capita expenditure on tobacco has actually increased significantly. A tax increase would have the

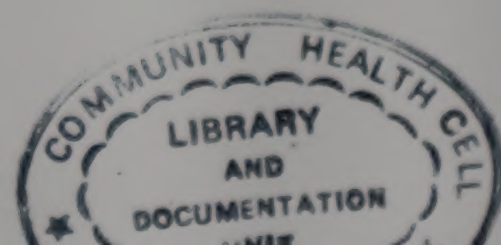
effect of reducing expenditures as more people quit, while maintaining government revenues.

A few simple measures can address any concerns about harming the poor through raising tobacco taxes. These include using a portion of the tax for:

- 1) Public education campaigns which target the poorest (most of whom are illiterate), using radio and television to communicate about the economic as well as health effects of tobacco consumption;
- 2) Offering free services to the poor to help them quit; and
- 3) Subsidizing other services for the poor, such as health or education. This could include providing nutritional supplements to young children and pregnant women, or subsidizing a food that is consumed only by the poorest.

While the tobacco companies argue for the right to smoke, we wonder who will argue for the rights of people—children and adults—to eat. We have shown that, among poor smokers, about 70% of what they spend on tobacco is money they would otherwise have spent on food. Men are far more likely to smoke than women. Men who use tobacco spend far more money on it than do women. Men also purchase most of the food for the household, and usually eat before the children and women. It is likely that men suffer the least from the diversion of their income to tobacco. This is a gender issue. This is a children's rights issue. This is an issue of poverty, of malnutrition, of human rights. This is an issue we cannot afford to ignore.

We do not wish to suggest that other, underlying causes of poverty do not need to be addressed. Issues such as land ownership, employment, and access to education and credit are critical in improving the status of the poor in Bangladesh. However, while addressing those areas, it is important not to forget an issue that could have an immediate and large impact on the lives of the poor: access to significantly larger amounts of money if tobacco consumption declined.



We strongly urge all organizations working on child survival, health, nutrition, food security, and poverty, to support efforts for tobacco control in Bangladesh. We encourage them to promote both public education and sound policies that can result in lower consumption of tobacco, and hence more money spent on food and other basic needs. Bangladesh needs a healthy, educated population in order to develop soundly. Better nutrition and more money invested in health and education will contribute greatly to the development of individuals, and hence of the

nation. While the government bears responsibility for investment in these sectors, it can also have a huge influence on individual investments. Strong policies in tobacco control would encourage individuals to shift their expenditures from tobacco to essential goods. **What neither the government nor the population of Bangladesh can afford is to continue to choose tobacco over basic needs.**

The health and survival of our children, and the economic development of the nation, demand strong action.

Policy options	Benefits
<i>Higher taxes on all tobacco products.</i>	Higher prices keep the poor and youth from becoming addicted to tobacco, and help motivate them to quit.
<i>A portion of the tax going to support programs on the electronic media to inform people about the harms to economy, health, and appearance from active and passive tobacco use.</i>	Those who consume tobacco, and those who are affected through exposure to tobacco smoke, have the right to understand what tobacco does to their and their family's health and economy.
<i>A comprehensive ban on all forms of promotion (including advertising and sponsorship) of tobacco products.</i>	This helps keep youth from starting to smoke, and makes it easier for adults to quit.
<i>Protection of non-smokers by banning smoking in public places (transportation, workplaces including restaurants, universities, etc.).</i>	Not only does this protect the health and rights of non-smokers, but it leads to large reductions in tobacco use

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Bangladesh Anti-Tobacco Alliance (BATA)

BATA consists of fifteen member organizations active in tobacco control. BATA's purpose is to contribute to the health and wellbeing of all Bangladeshis by educating the public and policymakers about the dangers of tobacco, and by helping to strengthen the nation's tobacco control legislation. BATA members are committed to work to reduce the damage to health, the environment, and both personal and national economy that result from tobacco consumption.